INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

100 North Senate Avenue
P O Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.in.gov/idem

983943

September 29, 2004

Ms. Jan Pels, HSE-5J
U.S. EPA, Region V
77 West Jackson Boulevard
Chicago, IL 60604

Dear Ms. Pels:

Re: Pre-CERCLIS Screening
U. S. Reduction Company
4610 Kennedy Avenue
East Chicago, Lake County, Indiana

MEMORANDUM OF DECISION

The Indiana Department of Environmental Management (IDEM) under a cooperative agreement with the U.S. EPA investigated this site as a Pre-CERCLIS Screening to determine whether the site warrants further investigation under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA a.k.a. Superfund).

The parcel is approximately 10 acres and was formerly occupied by U.S. Reduction Co. This parcel is located on the north side of E. Chicago Ave. just west of the intersection of Kennedy Ave. The site has a history of industrial use, much of which involved lead.

The Indiana Department of Environmental Management Site Investigations Section through historical research determined that numerous potential lead emission sources occurred throughout Indiana prior to regulations governing those industries. The U. S Reduction Company site is one facility discovered as a potential source of lead and other heavy metals that potentially emitted particulates, which may have contaminated surrounding residential areas. IDEM conducted surface soil sampling in the surrounding residential area to the east and west of the facility. Contaminant levels encountered were inconclusive as to whether or not the U.S Reduction Company is a potential responsible party.

U. S. EPA completed on-site and residential sampling in the vicinity of the U. S. Reduction Company site in conjunction with Resource Conservation and Recovery Act (RCRA) investigation of the USS Lead facility (5300 Kennedy Blvd.). U.S. EPA discovered high levels of lead in residential properties. U.S. EPA is handling the USS Lead facility under the RCRA program and the off-site residential contamination will be handled by the U.S. EPA Superfund program. U.S. EPA will determine responsible parties.

Due to the ongoing Superfund investigation of the USS Lead site, IDEM is deferring all future investigations and cleanup of residential properties to the U.S. EPA Superfund Program, and does not recommend any further action at the U. S. Reduction Company site.

From Eckels list of smelters
9/30/05

Should you have any questions regarding the content of this correspondence, please contact me at 317-232-4402.

Sincerely,

Dan Chesterson, Project Manager
Site Investigation Section
Office of Land Quality

NON-RESPONSIVE, PRE-DECISIONAL CONFIDENTIAL

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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Sincerely,

Dan Chesterson, Project Manager
Site Investigation Section
Office of Land Quality

From Eckels 1st of smelters
9/30/05

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 CENTRAL REGIONAL LABORATORY

536 SOUTH CLARK STREET

CHICAGO, ILLINOIS 60605

JUN 26 2002

Date:

Subject: Review of Region 5 Data for **IDEM Lead Site Screening**

From: **John V. Morris, Chemist**
Region 5 Central Regional Laboratory

To: Jan Pels
SE-4J

Attached are the results for: **IDEM Lead Site Screening**

CRL data set number: **20020073**

Samples analyzed for: **Lead**

Results are reported for sample designations: **2002IN01S01 through 2002IN01S81**

Date: 25 June 2002
Analyst: John V. Morris
Sample Batch Number: 20020073
Facility Name: IDEM Lead Site Screening
Analyte: Lead

Narrative for the Analysis of Lead in Soils and Sediments in Batch 20020073

Between 6-15 May 2002, eighty-one (81) soil and/or sediment samples were collected by the Indiana Department of Environmental Management for the purpose of screening for lead contamination. These samples were numbered sequentially, as 2002IN01S01 through 2002IN01S81. No separate station identifiers were present on the custody forms, other than the S01-S81 designations. These samples were received at CRL on 17 May 2002.

J.V. Morris checked out the samples and directed SEE employee A. Shih-Hoellwarth in the process of subsampling the soils and sediments for drying. During the week of 20 May 2002 the samples were dried. Over the next week, J.V.Morris performed the grinding and homogenizing. Because of the large number of samples, the digestions were broken into three digestion sets of 27 samples each. CRL SOP Metals025, a hot block digestion based on EPA method 200.2, was used. The digestion log numbers were 1379, 1380 and 1381. These were prepared between 5-14 June 2002. A fourth digestion, log number 1384, was prepared when the matrix spike for sample 2002IN01S75 was out of control, as discussed below. This digestion was performed on 20 June 2002.

The analyses were performed on 17, 18, 19 and 21 June 2002. Each digestion batch was performed on a separate day. CRL SOP Metals004 was used for the analyses. Because some of the samples were expected to be high concentration for lead, only the high spike solution was used. Since lead was the only analyte of interest, the quality control reports include only lead results, plus the calibration verification for aluminum, that being the element with the only serious interelement correction for lead. All quality control checks for lead were within stated limits in the SOP, with the exception of the last of nine matrix spikes, that for sample 2002IN01S75 in digestion log 1381. The recovery of 205% was not easily explained, since the other elements in the spike solution appeared to be as expected, so the sample was not double spiked. That sample and the ones following were redigested in digestion log 1384. In an attempt to determine what occurred with the spike failure, sample 2002IN01S75 was digested in triplicate, while the next sample, 2002IN01S76, was used for a regular matrix duplicate and spike. No problems were observed in the redigestion, and all audits were in control, including both duplicates of S75. A piece of glass or plastic was observed when the problem sample was redigested. Results for 2002IN01S75 through 2002IN01S81 were taken from the redigestion.

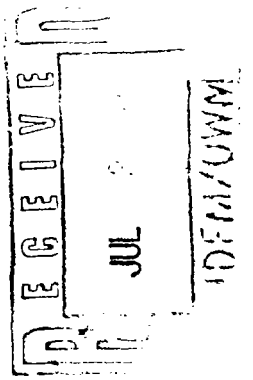
Samples 2002IN01S12, 2002IN01S13, 2002IN01S14, 2002IN01S26, 2002IN01S53, 2002IN01S77 and 2002IN01S78 were diluted to obtain results within the calibration range.

All analytical results files, sample information files and reformat files for ICP analysis can be found on the R5CRL data server using the following path:
h:\r5crl\vol1\EPA-metals\jvmorris\20020073\3300dv\

The narrative, QC summary spreadsheets, sample result calculation spreadsheets and the final sample report for ICP analysis can be found on the R5CRL data server using the following path:
h:\r5crl\vol1\EPA-metals\jvmorris\20020073\reports\

US EPA CRL - Region V
ICP Final Report Results

Sample Batch Number: 20020073
Study Name: IDEM Lead Site Screening



Sample ID	Element	Concentration	Units	Date Analyzed
2002IN01S01	Lead	29	mg/kg	17 June 02
2002IN01S02	Lead	32	mg/kg	17 June 02
2002IN01S03	Lead	390	mg/kg	17 June 02
2002IN01S04	Lead	95	mg/kg	17 June 02
2002IN01S05	Lead	39	mg/kg	17 June 02
2002IN01S06	Lead	44	mg/kg	17 June 02
2002IN01S07	Lead	140	mg/kg	17 June 02
2002IN01S08	Lead	710	mg/kg	17 June 02
2002IN01S09	Lead	74	mg/kg	17 June 02
2002IN01S10	Lead	43	mg/kg	17 June 02
2002IN01S11	Lead	25	mg/kg	17 June 02
2002IN01S12	Lead	5000	mg/kg	17 June 02
2002IN01S13	Lead	3200	mg/kg	17 June 02
2002IN01S14	Lead	5100	mg/kg	17 June 02
2002IN01S15	Lead	180	mg/kg	17 June 02
2002IN01S16	Lead	130	mg/kg	17 June 02
2002IN01S17	Lead	180	mg/kg	17 June 02
2002IN01S18	Lead	260	mg/kg	17 June 02
2002IN01S19	Lead	180	mg/kg	17 June 02
2002IN01S20	Lead	53	mg/kg	17 June 02
2002IN01S21	Lead	17	mg/kg	17 June 02
2002IN01S22	Lead	94	mg/kg	17 June 02
2002IN01S23	Lead	160	mg/kg	17 June 02
2002IN01S24	Lead	280	mg/kg	17 June 02
2002IN01S25	Lead	160	mg/kg	17 June 02
2002IN01S26	Lead	1800	mg/kg	17 June 02
2002IN01S27	Lead	780	mg/kg	17 June 02
2002IN01S28	Lead	220	mg/kg	18 June 02
2002IN01S29	Lead	190	mg/kg	18 June 02
2002IN01S30	Lead	100	mg/kg	18 June 02
2002IN01S31	Lead	230	mg/kg	18 June 02
2002IN01S32	Lead	68	mg/kg	18 June 02
2002IN01S33	Lead	240	mg/kg	18 June 02
2002IN01S34	Lead	480	mg/kg	18 June 02
2002IN01S35	Lead	220	mg/kg	18 June 02
2002IN01S36	Lead	990	mg/kg	18 June 02
2002IN01S37	Lead	350	mg/kg	18 June 02
2002IN01S38	Lead	420	mg/kg	18 June 02
2002IN01S39	Lead	340	mg/kg	18 June 02
2002IN01S40	Lead	280	mg/kg	18 June 02
2002IN01S41	Lead	410	mg/kg	18 June 02

JVM
21 June 02

US EPA CRL - Region V
ICP Final Report Results

Sample Batch Number: 20020073
Study Name: IDEM Lead Site Screening

Sample ID	Element	Concentration	Units	Date Analyzed
2002IN01S42	Lead	750	mg/kg	18 June 02
2002IN01S43	Lead	290	mg/kg	18 June 02
2002IN01S44	Lead	360	mg/kg	18 June 02
2002IN01S45	Lead	260	mg/kg	18 June 02
2002IN01S46	Lead	63	mg/kg	18 June 02
2002IN01S47	Lead	53	mg/kg	18 June 02
2002IN01S48	Lead	85	mg/kg	18 June 02
2002IN01S49	Lead	95	mg/kg	18 June 02
2002IN01S50	Lead	56	mg/kg	18 June 02
2002IN01S51	Lead	38	mg/kg	18 June 02
2002IN01S52	Lead	140	mg/kg	18 June 02
2002IN01S53	Lead	2800	mg/kg	18 June 02
2002IN01S54	Lead	100	mg/kg	18 June 02
2002IN01S55	Lead	40	mg/kg	19 June 02
2002IN01S56	Lead	19	mg/kg	19 June 02
2002IN01S57	Lead	40	mg/kg	19 June 02
2002IN01S58	Lead	73	mg/kg	19 June 02
2002IN01S59	Lead	64	mg/kg	19 June 02
2002IN01S60	Lead	31	mg/kg	19 June 02
2002IN01S61	Lead	110	mg/kg	19 June 02
2002IN01S62	Lead	30	mg/kg	19 June 02
2002IN01S63	Lead	180	mg/kg	19 June 02
2002IN01S64	Lead	17	mg/kg	19 June 02
2002IN01S65	Lead	250	mg/kg	19 June 02
2002IN01S66	Lead	82	mg/kg	19 June 02
2002IN01S67	Lead	210	mg/kg	19 June 02
2002IN01S68	Lead	220	mg/kg	19 June 02
2002IN01S69	Lead	400	mg/kg	19 June 02
2002IN01S70	Lead	470	mg/kg	19 June 02
2002IN01S71	Lead	450	mg/kg	19 June 02
2002IN01S72	Lead	440	mg/kg	19 June 02
2002IN01S73	Lead	150	mg/kg	19 June 02
2002IN01S74	Lead	92	mg/kg	19 June 02
2002IN01S75	Lead	220	mg/kg	21 June 02
2002IN01S76	Lead	320	mg/kg	21 June 02
2002IN01S77	Lead	1600	mg/kg	21 June 02
2002IN01S78	Lead	6700	mg/kg	21 June 02
2002IN01S79	Lead	300	mg/kg	21 June 02
2002IN01S80	Lead	140	mg/kg	21 June 02
2002IN01S81	Lead	140	mg/kg	21 June 02

US Reduction

JVM
25 June 02

CRL Data Review Qualification Codes

QUALIFIER	DESCRIPTION
B	This flag is used when the analyte is found in the associated ***B***lank as well as the sample. It indicates possible blank contamination and warns the user to take appropriate action while assessing the data. See the case narrative for a discussion of common lab contaminants and/or the relative concentration of contamination in the samples and blanks for relevance.
J	This flag is used when the analyte is estimated due to quality control limit(s) being exceeded. This flag accompanies all GC/MS tentatively identified compounds (TICs). This flag also applies to a suspected, unidentified interference. This flag is placed on affected detected results as well as non-detected (i.e., "U" flagged) results. (***J*** is the flag used in the Superfund CLP SOW and Data Review Functional Guidelines and is used by CRL for consistency.)
M	This flag is used when the analyte is confirmed to be qualitatively present in the sample, extract or digestate, with a quantity at or above the CRL ***M***ethod Detection Limit (MDL) but below the lowest concentration of the calibration curve. This flag indicates the quantitated value is estimated since it falls below the lowest calibration standard in the calibration curve.
N	This flag applies to GC/MS Te***N***tatively Identified Compounds (TICs) that have a mass spectral library match.
Q	This flag applies to analyte data that are severely estimated due to quality control and/or ***Q***uantitation problems, but are confirmed to be qualitatively present in the sample. No value is reported with this qualification flag.
R	This flag applies to analyte data that are ***R***ejected and unusable due to severe quality control, quantitation and/or qualitative identification problems. No other qualification flags are reported for this analyte. No value is reported with this qualification flag.
U	This flag in used when the analyte was analyzed for but ***U***ndetected in the sample. The CRL RL for the analyte accompanies this flag. When the customer requests CRL to report below our RL down to our MDL, undetected analytes are reported with a "U" code and the MDL. As with sample results that are positive, the value is corrected for dry weight, dilution and/or sample weight or volume.

WMD/W301

20020073 ⑥

ENVIRONMENTAL PROTECTION AGENCY
FOR THE TEAM: METALS

5010SD 7/1/02 Sheet 1 of 4

DIVISION/BRANCH Super-Fund SAMPLING DATE 5/8-15/02 LAB ARRIVAL DATE 5/17/02 DUE DATE 6/17/02

FIELD NUMBER 5010SD DATASET NUMBER 20020073 STUDY LEAD SITE SCREENING PRIORITY N CONTRACTOR IDEM

LAB LOG NUMBER	SAMPLE DESCRIPTION	SEDIMENTS SOLIDS PB MG/KG (DRY WT.) MET4193	MATRIX.......... TEST.......... UNITS.......... ME1235026	MATRIX.......... TEST.......... UNITS.......... ME1235026	MATRIX.......... TEST.......... UNITS.......... ME1235026	MATRIX.......... TEST.......... UNITS.......... ME1235026
2IN01						
S01	5-039336	X				
S02	5-039337	X				
S03	5-039338	X				
S04	5-039339	X				
S05	5-039340	X				
S06	5-039341	X				
S07	5-039342	X				
S08	5-039343	X				
S09	5-039344	X				
S10	5-039345	X				
S11	5-039346	X				
S12	5-039347	X				
S13	5-039348	X				
S14	5-039349	X				
S15	5-039350	X				
S16	5-039021	X				
S17	5-039022	X				
S18	5-039023	X				
S19	5-039024	X				
S20	5-039025	X				
S21	5-039026	X				

WMO/W3OI JUL 3 2002

20020073 501080 7/1/02 SHOOT 3 OF 4 (6)

ENVIRONMENTAL PROTECTION AGENCY
FOR THE TEAMS METALS

ISION/BRANCH Superfund SAMPLING DATE 5/6-15/02 LAB ARRIVAL DATE 5/17/02 DUE DATE 6/17/02

NUMBER 501080 DATASET NUMBER 20020073 STUDY LEAD SITE SCREENING PRIORITY N CONTRACTOR IDEM

LOG NUMBER	SAMPLE DESCRIPTION	SEDIMENTS SOLIDS PB MG/KG (DRY WT.) MET4193	MATRIX......... TEST......... UNITS......... ME1235826	MATRIX......... TEST......... UNITS......... ME1235826	MATRIX......... TEST......... UNITS......... ME1235826	MATRIX......... TEST......... UNITS......... ME1235826
LIN01						
S43	5-039048	X				
S44	5-039049	X				
S45	5-039050	X				
S46	5-039051	X				
S47	5-039052	X				
S48	5-039053	X				
S49	5-039054	X				
S50	5-039055	X				
S51	5-039056	X				
S52	5-039057	X				
S53	5-039058	X				
S54	5-039059	X				
S55	5-039060	X				
S56	5-039061	X				
S57	5-039062	X				
S58	5-039063	X				
S59	5-039064	X				
S60	5-039065	X				
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S62	5-039067	X				
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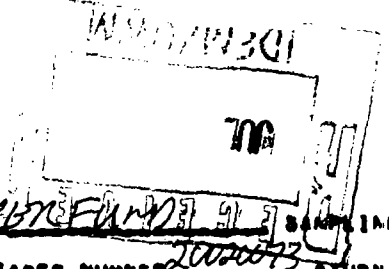

20020073

ENVIRONMENTAL PROTECTION AGENCY
FOR THE TEAMS METALS

501080

FILM SHEET 4 OF 4

(6)

DIVISION/BRANCH SUPERFUND SAMPLING DATE 5/6-15/02 LAB ARRIVAL DATE 5/17/02 DUE DATE ~~6/17/02~~

NUMBER 501080 DATASET NUMBER 20020073 STUDY LEAD SITE SCREENING PRIORITY N CONTRACTOR IOSM

LOG NUMBER	SAMPLE DESCRIPTION	SEDIMENTS SOLIDS PR MG/KG (DRY WT.) MET4193	MATRIX..... TEST..... UNITS..... PE1235826	MATRIX..... TEST..... UNITS..... PE1235826	MATRIX..... TEST..... UNITS..... PE1235826	MATRIX..... TEST..... UNITS..... PE1235826
2IN01						
S64	5-039069	X				
S65	5-039070	X				
S66	5-039071	X				
S67	5-039072	X				
S68	5-039073	X				
S69	5-039074	X				
S70	5-039075	X				
S71	5-039076	X				
S72	5-039077	X				
S73	5-039078	X				
S74	5-039079	X				
S75	5-039080	X				
S76	5-039081	X				
S77	5-039082	X				
S78	5-039083	X				
S79	5-039084	X				
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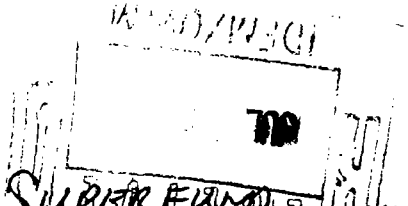

20020073

ENVIRONMENTAL PROTECTION AGENCY
FOR THE TEAM METALS

5010SD 7/11/02 SHEET 2 OF 4

(6)

ISION/BRANCH SUPERFUND SAMPLING DATE 5/6-15/02 LAB ARRIVAL DATE 5/17/02 DUE DATE 6/17/02

NUMBER 5010SD DATASET NUMBER 20020073 STUDY LEADSITE SCREENING PRIORITY N CONTRACTOR IDEM

LOG IBER	SAMPLE DESCRIPTION	SEDIMENTS SOLID S PA MG/KG (DRY WT.) MET6193	MATRIX..... TEST..... UNITS..... PE1235826	MATRIX..... TEST..... UNITS..... PE1235826	MATRIX..... TEST..... UNITS..... PE1235826	MATRIX..... TEST..... UNITS..... PE1235826
DINOI						
S22	5-039027	X				
S23	5-039028	X				
S24	5-039029	X				
S25	5-039030	X				
S26	5-039031	X				
S27	5-039032	X				
S28	5-039033	X				
S29	5-039034	X				
S30	5-039035	X				
S31	5-039036	X				
S32	5-039037	X				
S33	5-039038	X				
S34	5-039039	X				
S35	5-039040	X				
S36	5-039041	X				
S37	5-039042	X				
S38	5-039043	X				
S39	5-039044	X				
S40	5-039045	X				
S41	5-039046	X				
S42	5-039047	X				